

The presently pending Claims 1-9 have been rejected under the applicants' description of the prior art ("AAPA"), as set forth and illustrated in Fig. 2 of this application.

Initially, Applicants respectfully submit that the AAPA does not teach the claimed invention, as is explained in the specification pages 1-6.

With respect to the indication made in the rejection of Claims 1 and 8 that the "wave-like" profile is inherently shown in the AAPA, Fig. 2, it is respectfully suggested that the "wave-like" profile cannot be formed due to complete planarization of the entire surface along the line AA', as shown in Fig. 2. Thus, the AAPA illustrated in Fig. 2 cannot but have a linear top profile. This fact can be confirmed from the first sentence of the paragraph at page 5, line 14, et seq. of the specification in which it is stated: "A general CMP process completely planarizes an entire surface regardless of the field and active areas h and t along a dotted line AA'". Accordingly, the indication that the AAPA describes the "wave-like" profile seems to result from misunderstanding of the AAPA, as described, and the rejection is considered improper.

Additional reliance on the rejection as obvious over the AAPA in view of U.S. Patent No. 5,356,833, (Maniar et al.) is also misplaced. Maniar et al. fail to teach the limitation described above which is not taught by the AAPA, and it is respectfully submitted consequently that the obviousness rejection is not correct since the rejection fails to set forth a *prima facie* case of obviousness. The present invention is characterized in that the surface polished by CMP has the "wave-like" profile or a non-linear top profile. Maniar et al. relates to a process for forming an intermettalic member and does not disclose the "wave-like" profile as in the present invention at all. Moreover, the CMP slurry

LADAS &amp; PARRY

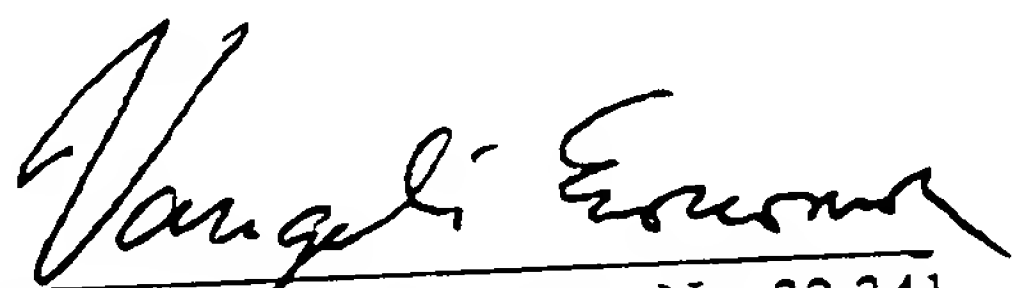
12/13/2002 16:55 FAX 312 427 8863

disclosed in the cited Maniar et al. reference is one of a number of materials well known in the art. Further, in the present invention, a polishing selection ratio between the insulating interlayer and the gate metal layer is set to no less than 50, whilst the cited reference Maniar et al. teach a polishing selection ratio of 1:1.

For the above reasons, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejections. An indication of allowable subject matter is earnestly solicited.

Respectfully submitted,

December 13, 2002

  
Vangelis Economou -Reg. No. 32,341  
c/o Ladas & Parry  
224 South Michigan Avenue - Suite 1200  
Chicago Illinois 60604  
Tel. No. (312) 427-1300

FAX RECEIVED

DEC 13 2002

TECHNOLOGY CENTER 2800

Ladas & Parry  
224 SOUTH MICHIGAN AVENUE • CHICAGO, ILLINOIS 60604

Facsimile: (312) 427-6663

Facsimile: (312) 427-6668

CONFIDENTIAL TELEFAX COMMUNICATION 4 Page(s) in Length  
(including this cover sheet)

TO: Examiner Pham, Thanh V. Fax. No.: (703) 308-7382  
Art Unit 2823

FROM: Van Economou - Ladas & Parry (312) 427-1300

DATE: December 13, 2002

RE: U. S. Patent Application No. 09/994,284

Please Deliver the attached proposed claims to Ex. Pham, Thanh V., as soon as possible.  
This application is under a FINAL REJECTION.

THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL AND EXEMPT FROM DISCLOSURE. If the reader of this message is not the intended recipient or an employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return the original message to us by mail. Thank you.

CONFIDENTIAL TELEFAX COMMUNICATION 4 Page(s) in Length

**FAX RECEIVED**

DEC 13 2002

TECHNOLOGY CENTER 2800